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FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

AUG 27 2001

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

**In the Matter of
Petition of AT&T Communications
of Virginia, Inc., Pursuant
to Section 252(e)(5) of the
Communications Act, for Preemption
of the Jurisdiction of the Virginia
State Cooperation Commission
Regarding Interconnection Disputes
with Verizon-Virginia, Inc.**

CC Docket No. 00-251

**In the Matter of
Petition of WorldCom, Inc. Pursuant
to Section 252(e)(5) of the
Communications Act for Expedited
Preemption of the Jurisdiction of the
Virginia State Corporation Commission
Regarding Interconnection Disputes
with Verizon-Virginia, Inc., and for
Expedited Arbitration**

CC Docket No. 00-218

REBUTTAL TESTIMONY OF JOHN I. HIRSHLEIFER

ON BEHALF OF

AT&T¹ AND WORLDCOM, INC.

August 27, 2001

¹ The AT&T entities sponsoring this Rebuttal Testimony are AT&T Communications of Virginia, Inc., TCG Virginia, Inc., ACC National Telecom Corp., MediaOne of Virginia and MediaOne Telecommunications of Virginia, Inc. (together, "AT&T").

TABLE OF CONTENTS

I.	INTRODUCTION	3
II.	TELRIC COST PRINCIPLES DO NOT REQUIRE THE ASSUMPTION THAT VZ-VA FACES INTENSE COMPETITION REGARDLESS OF THE FACTS.....	4
III.	THE RATE OF RETURN ADVOCATED BY VZ-VA IS SIGNIFICANTLY HIGHER THAN JUSTIFIED BY THE RISKS OF THE BUSINESS AT ISSUE.....	8
1)	DR. VANDER WEIDE'S PERPETUAL GROWTH ASSUMPTION IS NOT SUBSTANTIATED AND GUARANTEES AN UNDULY HIGH RATE OF RETURN.....	12
2)	DR. VANDER WEIDE FAILS TO SELECT A REASONABLE GROUP OF COMPARABLE COMPANIES IN HIS ANALYSIS.....	17
3)	DR. VANDER WEIDE OVERSTATES THE RISKS INHERENT IN THE BUSINESS OF LEASING UNBUNDLED NETWORK ELEMENTS AT WHOLESALE PRICES.....	19
IV.	DR. VANDER WEIDE HAS OVERESTIMATED THE COST OF DEBT.....	32
V.	DR. VANDER WEIDE'S COST OF CAPITAL ESTIMATE ERRONEOUSLY FAILS TO ESTIMATE THE CAPITAL STRUCTURE OF THE UNBUNDLED NETWORK ELEMENT WHOLESALING BUSINESS	33

I. INTRODUCTION

Q. PLEASE STATE YOUR FULL NAME AND OCCUPATION.

A. My name is John I. Hirshleifer and my business address is Charles River Associates, Inc., 10877 Wilshire Blvd. Suite #710, Los Angeles, California 90024. I am a Vice President at Charles River Associates, Inc. (CRA), an international financial and economic consulting firm.

Q. ARE YOU THE SAME JOHN HIRSHLEIFER WHO PREVIOUSLY SUBMITTED PREPARED DIRECT TESTIMONY ON BEHALF OF AT&T AND MCI WORLDCOM IN THIS PROCEEDING?

A. Yes, I am.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my rebuttal testimony is to respond to the prepared direct testimony submitted in this proceeding by Dr. James H. Vander Weide on behalf of Verizon Virginia ("VZ-VA") regarding the cost of capital.

Q. HOW IS YOUR TESTIMONY ORGANIZED?

A. My testimony is organized as follows. In Section II, I address the positions regarding cost of capital advanced by VZ-VA and me. In the remaining sections of the testimony, I address in more detail the analysis submitted by Dr. Vander Weide on behalf of VZ-VA, including his cost of equity estimate (Section III), his estimated cost of debt (Section IV), and his recommended capital structure (Section V).

1
2 **II. TELRIC COST PRINCIPLES DO NOT REQUIRE THE**
3 **ASSUMPTION THAT VZ-VA FACES INTENSE COMPETITION**
4 **REGARDLESS OF THE FACTS.**

5 **Q. DR. VANDER WEIDE INDICATES IN HIS DIRECT TESTIMONY THAT THE**
6 **COST OF CAPITAL IS FORWARD-LOOKING. HE STATES FURTHER THAT**
7 **“THE FORWARD-LOOKING ECONOMIC COST PRINCIPLE...IS BASED ON**
8 **THE ASSUMPTION THAT THE MARKET FOR LOCAL EXCHANGE**
9 **SERVICES IS FULLY COMPETITIVE” [VW, PG. 36]. DOES THE FCC AGREE**
10 **WITH DR. VANDER WEIDE’S ASSUMPTION?**

11 **A. No. In its August 8, 1996 Order, the FCC states explicitly at paragraph 702 that:**

12 Based on the current record, we conclude that the currently authorized rate of
13 return at the federal or state level is a reasonable starting point for TELRIC
14 calculations, and *incumbent LECs bear the burden of demonstrating with*
15 *specificity* that the business risks that they face in providing unbundled network
16 elements and interconnection services would justify a different risk-adjusted cost
17 of capital or depreciation rate. *These elements generally are bottleneck, monopoly*
18 *services that do not now face significant competition.* We recognize that
19 incumbent LECs are likely to face increased risks given the overall increases in
20 competition in this industry, which generally *might* warrant an increased cost of
21 capital, *but note that, earlier this year, we instituted a preliminary inquiry as to*
22 *whether the currently authorized federal 11.25 percent rate of return is too high*
23 *given the current marketplace cost of equity and debt.* On the basis of the current
24 record, we decline to engage in a time-consuming examination to determine a new
25 rate of return, which may well require a detailed proceeding. *States may adjust*
26 *the cost of capital if a party demonstrates to a state commission that either a*
27 *higher or lower level of cost of capital is warranted, without that commission*
28 *conducting a ‘rate-of-return or other rate based proceeding.’ We note that the*
29 *risk-adjusted cost of capital need not be uniform for all elements. We intend to*
30 *re-examine the issue of the appropriate risk-adjusted cost of capital on an*

1 *ongoing basis*, particularly in light of the state commissions' experiences in
2 addressing this issue in specific situations. [emphasis added] [footnotes omitted].

3 It is clear that none of the above provisions stated in paragraph 702 which I have
4 highlighted would be necessary if the FCC intended a presumption of full competition.

5 **Q. IF THE ILEC'S HAVE A STRICT BURDEN OF PROOF REQUIREMENT (AS**
6 **STATED IN PARAGRAPH 702) FOR DEMONSTRATING THAT THE MARKET**
7 **FOR NETWORK ELEMENTS IS RISKIER FOR PURPOSES OF COST OF**
8 **CAPITAL ESTIMATION, CAN DR. VANDER WEIDE MERELY ASSUME**
9 **THAT THE NETWORK ELEMENT MARKET – WHICH IS AT THIS TIME**
10 **DOMINATED BY VZ-VA – IS COMPETITIVE?**

11 **A.** No, he cannot. Dr. Vander Weide has “assumed away” the requisite burden of proof. As
12 Dr. Vander Weide provides no evidence that the business of network element leasing has
13 become fully competitive, this inappropriate foundational assumption appears to make his
14 entire analysis moot.

15 **Q. DOES DR. VANDER WEIDE CITE THE FCC'S MASS. 271 ORDER IN AN**
16 **ATTEMPT TO BOLSTER HIS FAULTY ASSUMPTION OF A FULLY**
17 **COMPETITIVE MARKET [VW, P. 6]?**

18 **A.** Yes. What Dr. Vander Weide fails to note, however, is that the FCC specifically
19 questioned the cost of capital decided by the Massachusetts Department of
20 Telecommunications and Energy in its most recent UNE order because of state specific
21 factors in Massachusetts, such as the level of competition:

1 Commenters have raised legitimate concerns regarding some of the inputs
2 used by Massachusetts in calculating its loop rates. In particular, we note
3 that the Massachusetts Department utilized a cost of capital of 12.16
4 percent. This is higher than the cost of capital that the Massachusetts
5 Department has used in setting Verizon's local rates and substantially
6 higher than the cost of capital employed by any of the other states in
7 Verizon's region. AT&T questions whether there is any reason to believe
8 that offering UNEs on a wholesale basis, where Verizon faces no
9 competition, is riskier than offering retail service, where it now has
10 competition. *We question whether this relatively high cost of capital is*
11 *sufficiently justified by state-specific factors.*¹ [emphasis added] [footnotes
12 omitted]

13 It is clear that the FCC is not making the hypothetical assumption of full competition that
14 Dr. Vander Weide would attribute to it.

15 **Q. DID THE FCC IN FACT CONSIDER AND EXPLICITLY REJECT THE**
16 **ASSUMPTION OF FULL COMPETITION FOR TELRIC PURPOSES?**

17 A. Yes. At paragraph 688 of the FCC's August 8, 1996 Order, it stated that "...USTA's
18 argument unrealistically assumes that competitive entry would be instantaneous. The
19 more reasonable assumption of entry occurring over time will reduce the costs associated
20 with sunk investment."

21 **Q. IS THERE ANY CONNECTION BETWEEN DR. VANDER WEIDE'S**
22 **HYPOTHETICAL ASSUMPTION OF A FULLY COMPETITIVE MARKET AND**
23 **A FORWARD-LOOKING COST OF CAPITAL?**

¹ FCC Memorandum Opinion and Order, *In the Matter of Application of Verizon New England Inc., Bell Atlantic Communications, Inc. (d/b/a Verizon Long Distance), NYNEX Long Distance Company (d/b/a Verizon Enterprise Solutions) And Verizon Global Networks Inc., For Authorization to Provide In-Region, InterLATA Services in Massachusetts*, CC Docket No. 01-9, Adopted and released: April 16, 2001, ¶ 38, at 19-20 (footnotes omitted) (emphasis added).

1 A. None at all. Economic costs of capital are by definition forward looking. In other words,
2 when assessing the cost of capital of any publicly-traded company as of today, the market
3 accounts for all known risks existing currently and the possibility of risks that could
4 develop or increase in the future. In the context of a publicly-traded telephone holding
5 company, which owns local exchange companies and network elements, the market does
6 not hypothetically assume that the network element leasing business will immediately
7 become competitive when the real-world evidence indicates that facilities competition
8 exists only to a very limited degree and may take years to develop. Instead, the market
9 continuously evaluates real-world information regarding all relevant risks, including
10 those which may arise or increase in the future, and incorporates the likelihood of those
11 risks occurring into the current costs of capital of the telephone holding companies.
12 Consequently, by assuming a fully competitive market, Dr. Vander Weide has calculated
13 a purely hypothetical cost of capital, not a forward-looking economic cost of capital as
14 required for this proceeding.

1 **III. THE RATE OF RETURN ADVOCATED BY VZ-VA IS**
2 **SIGNIFICANTLY HIGHER THAN JUSTIFIED BY THE RISKS OF**
3 **THE BUSINESS AT ISSUE.**

4
5 **Q. WHAT IS YOUR VIEW OF THE RATES OF RETURN SUBMITTED IN THIS**
6 **PROCEEDING ON BEHALF OF VZ-VA?**

7 A. I have reviewed the testimony submitted by Dr. James Vander Weide for VZ-VA, who
8 advocates a 12.95 percent return on total capital. I believe this rate of return is excessive,
9 unreasonable, and anticompetitive. Indeed, if the objective of this proceeding is to
10 facilitate competitive access into the local exchange market now served by the LECs – as
11 the FCC's August 8, 1996 Order makes clear – then the rates of return advocated by VZ-
12 VA represent an obstacle to such entry.

13 **Q. WHAT IS THE BASIS FOR YOUR OPINION?**

14 A. Dr. Vander Weide's recommendation is not supported by rigorous analysis that would
15 achieve the objectives of cost of capital estimation.

16 **Q. WHAT ARE THE OBJECTIVES THAT MUST BE SATISFIED IN ESTIMATING**
17 **THE COST OF CAPITAL FOR PURPOSES OF THIS PROCEEDING?**

18 A. A fundamental objective in estimating the cost of capital is choosing the correct target.
19 The most widely-accepted techniques for determining the cost of capital therefore begin
20 with the capital costs experienced by companies with businesses comparable to the line of
21 business under consideration. In this case, therefore, the first step is to identify a group of

1 comparable companies (or proxy group) with characteristics as similar as possible to the
2 wholesale business of leasing unbundled network elements, which is the business for
3 which the cost of capital is being determined.

4 **Q. WHAT THEN, IS THE CORRECT APPROACH TO ESTIMATING THE COST**
5 **OF CAPITAL THAT ACHIEVES THIS OBJECTIVE?**

6 A. The correct approach is spelled out in detail in my prepared direct testimony. First, I
7 selected a group of comparable, publicly traded, independent telephone companies from
8 which to derive my data.² Second, I calculated the actual debt costs incurred by Verizon.
9 Third, to estimate the cost of equity, I used both: (a) a three-stage discounted cash flow
10 ("DCF") methodology based on the future dividends expected by investors in the
11 comparable group of companies identified in step one; and (b) the capital asset pricing
12 model ("CAPM") in which I calculated a "risk premium" for the comparable companies
13 (based on their price volatility in relation to other stocks), which I then added to a risk
14 free rate of return. Finally, using the debt cost calculated above, and the midpoint of the
15 cost of equity calculated using the DCF and CAPM methods, I calculated a weighted
16 average cost of capital based, alternatively, on Verizon's book capital structure and then
17 on its market weighted capital structure (reflecting the market value of Verizon's stock).

² Currently, there are no "pure-play" companies operating exclusively as a wholesale provider of unbundled network elements. Indeed, there are few, if any, publicly-traded firms that provide only local telephone service. The most comparable companies are the large regional telephone holding companies ("RHC"s), which have been required to provide unbundled network elements at wholesale. If anything, because RHC's currently engage in more risky businesses of selling retail phone service, cellular service, paging, information services, long-distance, cable and the like, using these companies as comparables leads to cost of capital estimates that are necessarily conservative (*i.e.*, too high).

1 Based on this analysis, I calculated a weighted average cost of capital range of
2 between 9.17 percent and 9.91 percent with the midpoint estimate of 9.54 percent, based
3 on costs of debt and equity of 7.86 percent and 10.42 percent, respectively, and a
4 debt/equity capital structure of 49/51 percent, on the low end, and 20/80, on the high end.

5 **Q. IS DR. VANDER WEIDE'S TESTIMONY CONSISTENT WITH THE MOST**
6 **FUNDAMENTAL OBJECTIVES OF COST OF CAPITAL ANALYSIS?**

7 A. No, in at least three significant respects. First, in attempting to estimate the cost of
8 equity, Dr. Vander Weide: (a) employs unreasonable sustained growth assumptions in his
9 single stage DCF analysis; and (b) measures the cost of capital for virtually all the S&P
10 Industrials rather than comparable companies in a similar line of business, much less a
11 business established for the purpose of leasing unbundled network elements at wholesale.
12 Second, in measuring the cost of debt, Dr. Vander Weide ignores the debt costs actually
13 incurred in the line of business at issue, using instead the cost of debt reported by
14 Moody's for long term A-rated industrial bonds. Finally, in calculating a weighted
15 average cost of capital, Dr. Vander Weide relies exclusively on a market weighted capital
16 structure for the S&P Industrial and telecommunications companies, notwithstanding that
17 the business of unbundled network elements at wholesale is subject to far fewer risks
18 (competitive and otherwise).

19 Based on this analysis, Dr. Vander Weide estimates a weighted average cost of
20 capital of 12.95 percent, using a 7.55 percent cost of debt, a 14.75 percent cost of equity,
21 and a debt/equity capital structure of 25/75 percent.

1
2
3 **A. DR. VANDER WEIDE'S METHODOLOGY FOR DEFINING THE COST**
4 **OF EQUITY IS SYSTEMATICALLY BIASED TO PRODUCE AN**
5 **UNREASONABLY HIGH COST OF CAPITAL ESTIMATE.**
6

7 **Q. WHAT ARE THE MAJOR DEFICIENCIES OF DR. VANDER WEIDE'S**
8 **APPROACH TO ESTIMATING THE COST OF EQUITY CAPITAL?**

9 A. Almost every aspect of Dr. Vander Weide's approach is indefensible. First, and most
10 significant in terms of his results, Dr. Vander Weide uses a single-stage DCF analysis
11 that assumes that the five year growth rates he observes in his group of "comparable"
12 companies – *i.e.*, the S&P Industrials – will persist indefinitely for the wholesale
13 unbundled network element business at issue in this proceeding.

14 Second, and more fundamentally, while Dr. Vander Weide agrees with me that
15 the cost of equity capital is largely a function of risk, he does not select a comparable
16 group consisting of companies with similar risk. Instead he performs his primary DCF
17 analysis on a group consisting of virtually all the S&P Industrials, including such diverse
18 firms as autoparts manufacturers, oil companies, producers of food and food ingredients,
19 publishing and entertainment companies and pharmaceutical giants.

20 Dr. Vander Weide attempts to bootstrap his choice of such an unorthodox (indeed,
21 non-comparable) proxy group, by claiming that there are great risks posed to VZ-VA by
22 facilities-based competition in the Virginia market and by touting the riskiness of the
23 retail telephone business in the local exchange market. However, Dr. Vander Weide

1 ignores the critical facts that VZ-VA is overwhelmingly dominant in its territory, and that
2 the business at hand in this proceeding is not local retail phone service, but rather the
3 wholesale business of leasing network elements to CLECs that provide competitive
4 phone service to an existing retail market.

5 Third, Dr. Vander Weide misinterprets the TELRIC standard as assuming not
6 only the costs but also the *competitive risks* of a hypothetical highly competitive market.
7 This assumption is not only completely inconsistent with the FCC's August 8, 1996
8 Order, but also inconsistent with the economic cost of capital.

9
10 **1) DR. VANDER WEIDE'S PERPETUAL GROWTH**
11 **ASSUMPTION IS NOT SUBSTANTIATED AND**
12 **GUARANTEES AN UNDULY HIGH RATE OF**
13 **RETURN.**

14 **Q. WHAT ARE THE CONSEQUENCES OF DR. VANDER WEIDE'S PERPETUAL**
15 **GROWTH ASSUMPTION?**

16 A. Dr. Vander Weide's approach systematically guarantees an inappropriately high rate of
17 return estimate. Dr. Vander Weide assumes that the I/B/E/S five-year growth rate
18 forecasts for the S&P Industrial companies he uses in his DCF analysis – which on their
19 face make no prediction of growth beyond five years – will continue into the future
20 forever. This has the effect of grossly overstating the return on equity for these
21 companies.

1 The fallacy of Dr. Vander Weide's growth assumptions is easily demonstrated. If
2 any one of the companies in Dr. Vander Weide's S&P group experienced super-normal
3 growth in excess of the market-wide rate of growth forever, that one company would
4 eventually grow to become the entire economy. The impossibility of such a result proves
5 that rapidly growing companies can continue such growth on average only for a relatively
6 short period of time, at which point their growth must converge with the growth rate of
7 the overall economy. Accounting for the inevitable growth rate convergence in the DCF
8 model – as I did with my three-stage DCF analysis – properly reconciles the cost of
9 equity estimate with market growth assumptions.

10 **Q. IN REBUTTALS TO YOUR TESTIMONIES FILED IN OTHER STATE UNE**
11 **COST PROCEEDINGS, DR. VANDER WEIDE HAS SAID THAT THE USE OF**
12 **MULTIPLE STAGE DCF MODELS IS NOT NECESSARY. IS THIS TRUE?**

13 **A.** No. Quite to the contrary. The perpetual growth assumption systematically guarantees
14 an inaccurately high cost of equity estimate inconsistent with investor expectations.
15 Prominent economists familiar with current cost of capital research have recognized that
16 the simple perpetual growth DCF model using short-run forecasts is inappropriate to use
17 if a company's short-run growth rate is expected to exceed the long-run growth rate of the
18 economy, or the cost of equity will be overestimated. I have cited these economists and
19 practitioners extensively in my direct testimony.

20 Dr. Vander Weide has cited no credible support for the naïve application of the
21 perpetual growth DCF model using short-run growth forecasts in this circumstance.

1 **Q. DO YOU BELIEVE THAT THIS COMMISSION SHOULD NECESSARILY USE**
2 **THE PERPETUAL GROWTH DCF MODEL IF IT HAS BEEN USED FROM**
3 **TIME-TO-TIME IN PAST REGULATORY PROCEEDINGS?**

4 A. No. As highlighted by the excerpts of academics and practitioners cited in my direct
5 testimony, one must understand when the perpetual growth DCF model is – and is not –
6 suitable. In the case of a regulated utility in the traditional regulation setting, growth has
7 traditionally been limited and has not exceeded the growth rate of the economy. If the
8 growth rate does not exceed the economy-wide growth rate, and the growth rate is
9 expected to be very stable, the use of the perpetual growth model is reasonable. In this
10 case, however, I use a set of comparables comprised of holding companies which are
11 engaged in numerous businesses that are, in the short-run, expected to grow at rates much
12 greater than the aggregate economy. Verizon's own international business segment, as an
13 example, grew by 18.6% in 2000 and 21.2% in 1999.³ It is absolutely clear that this
14 business will not grow at such a high rate indefinitely.

15 **Q. IN PRIOR STATE REBUTTAL TESTIMONIES, DR. VANDER WEIDE HAS**
16 **ARGUED THAT SOME COMPANIES HAVE GROWN AT HIGH RATES FOR**
17 **LONGER THAN FIVE YEARS. DOES THIS INVALIDATE YOUR APPROACH**
18 **AND MAKE THE PERPETUAL GROWTH MODEL MORE SUITABLE?**

19 A. Not at all. In the real world, individual companies participating in a particular line of
20 business will have differing growth rates which will occur over different time periods.

1 Clearly, a few companies will do extraordinarily well, and may grow at high rates for
2 many years. In fact, in my analysis I assume above average growth for most telephone
3 companies over the next nineteen years. Other companies will perform very poorly, and
4 may experience low or negative growth (or go out of business entirely). Most industry
5 participants will experience growth somewhere between the highest-growth stars and the
6 weak underperformers. Investors today cannot definitively predict which companies in
7 an industry will be the winners and which will be the losers. On average, no reasonable
8 analyst would expect high growth in excess of the economy's growth for all of the
9 industry's companies forever.

10 **Q. DR. VANDER WEIDE HAS ARGUED PREVIOUSLY IN OTHER**
11 **PROCEEDINGS THAT THE PERPETUAL GROWTH ASSUMPTION IS**
12 **INCONSEQUENTIAL BECAUSE LATER CASH FLOWS HAVE LITTLE**
13 **IMPACT ON PRESENT VALUE. IS THIS CORRECT?**

14 A. This is plainly wrong, as evidenced by the enormous difference between Dr. Vander
15 Weide's and my cost of equity estimates using the DCF model. His argument overlooks
16 the tremendous impact of compounding over time. By assuming perpetual dividend
17 growth compounding at unrealistically high rates, but at the same time holding the price
18 of the subject company's stock constant in the DCF model, the discount rate – or cost of
19 equity – must get much higher by mathematical necessity in order to equate the enormous
20 assumed dividends over time to the current price. In contrast, a more logical alternative

³ Verizon Communications Inc. SEC Form 10-K405 for the period ending 12/31/00.

1 assumption would be that – if the market genuinely believed that high growth would be
2 realized forever – the price of the subject company would rise.

3 **Q. HOW HAS DR. VANDER WEIDE ATTEMPTED TO DEMONSTRATE THIS**
4 **ARGUMENT?**

5 A. In a Virginia UNE cost proceeding Dr. Vander Weide attempted to demonstrate the
6 supposed minimal impact of later dividend payments by showing how small a current
7 dividend payment would be when discounted back in time over 20 years. This
8 explanation is inaccurate, however, because in his DCF model future dividends were not
9 fixed at the current dividend value but were growing at his high growth rate for all
10 eternity. It is these inflated dividends that must be discounted when considering the
11 effect of using a single stage model. So, for example, the year 20 dividend is determined
12 by compounding today's dividend for 20 years of growth [$D_0 \times (1 + g_1) \times (1 + g_2) \times \dots \times$
13 $(1 + g_{20})$]. This means that dividend payments beyond 20 years are even greater and have
14 a significant effect on the cost of equity derived from a one-stage DCF model when
15 growth rates are higher than the expected growth in the economy.

16 **Q. CAN YOU ILLUSTRATE THE EFFECT OF THIS ASSUMPTION?**

17 A. As an example, I ran my DCF model for Verizon as of June 30, 2000 using a perpetual
18 growth assumption and holding all other factors equal. The cost of equity capital for
19 Verizon derived from this one-stage DCF model is 14.78%. This is 371 basis points
20 higher than the 11.07% cost of equity capital derived from my three-stage model (before
21 $\frac{1}{4}$ - $\frac{3}{4}$ weighting). In order to justify this enormous increase in the cost of equity,

proponents of the single-stage model must perform an impossible feat – i.e., present compelling evidence that sample companies will maintain growth rates higher than that of the economy not only for 20 years, but forever, and that the companies' stock prices will not rise to try to capture the enormous value of this phenomenal growth.

2) DR.VANDER WEIDE FAILS TO SELECT A REASONABLE GROUP OF COMPARABLE COMPANIES IN HIS ANALYSIS.

Q. WHY ARE YOU CRITICAL OF DR. VANDER WEIDE'S USE OF THE S&P INDUSTRIALS AS A COMPARISON GROUP FOR ESTIMATING THE COST OF CAPITAL FOR THE WHOLESALE BUSINESS OF LEASING UNBUNDLED NETWORK ELEMENTS?

A. Dr. Vander Weide's primary analysis is based on the performance of large industrial companies generally, rather than a group of comparable companies. As a result, his findings are based on determinants that are irrelevant to the wholesale telephone business. It simply makes no sense to select a proxy group that has nothing in common with firms providing local retail phone service, much less a company set up solely for the purpose of leasing unbundled network elements at wholesale. Under his approach, Dr. Vander Weide must strain to identify similarities among a diverse group of companies – *i.e.*, between companies in the telephone business and large businesses in general – out of a sea of differences.

1 It makes far more sense to begin with a group of companies – *i.e.*, retail telephone
2 holding companies – that have some similarity to the firm that will sell unbundled
3 network elements at wholesale. At that point, we can discuss intelligently any differences
4 in risk between a company that sells unbundled network elements and one that provides
5 local telephone service at retail.

6 **Q. IS THE USE OF A LARGE, DIVERSE PROXY GROUP LIKE THE S&P**
7 **INDUSTRIALS TO ESTIMATE COST OF CAPITAL CONSISTENT WITH**
8 **REAL-WORLD FINANCIAL PRACTICE?**

9 A. No. A fundamental objective in estimating the cost of capital is choosing the correct
10 target. The most widely-accepted technique for determining the cost of capital therefore
11 begins with the capital costs experienced by companies with businesses comparable to the
12 line of business under consideration. In this case, therefore, the first step is to identify a
13 group of comparable companies (or proxy group) with characteristics as similar as
14 possible to the wholesale business of providing network elements, which is the business
15 for which the cost of capital is being determined.

16 **Q. DO INVESTMENT BANKS USE THE S&P INDUSTRIALS AS THE**
17 **COMPARABLES FOR TELEPHONE COMPANIES?**

18 A. No. Major brokerage firms and investment banks that issue analyst reports for the
19 telecommunication companies view other telephone holding companies as the best
20 proxies for the subject telephone holding company.

1 3) **DR. VANDER WEIDE OVERSTATES THE RISKS**
2 **INHERENT IN THE BUSINESS OF LEASING**
3 **UNBUNDLED NETWORK ELEMENTS AT**
4 **WHOLESALE PRICES.**

5 **Q. HOW DO YOU RESPOND TO DR. VANDER WEIDE'S ATTEMPT TO JUSTIFY**
6 **HIS APPROACH ON THE GROUNDS THAT INVESTMENT IN LEC**
7 **FACILITIES (SUCH AS VZ-VA) THAT ARE REQUIRED TO PROVIDE UNES**
8 **INVOLVES RISKS AT LEAST AS GREAT AS INVESTMENT IN THE**
9 **AVERAGE S&P INDUSTRIAL COMPANY?**

10 A. With extreme skepticism. Dr. Vander Weide merely assumes (without offering a shred of
11 empirical support) that the risks faced by VZ-VA are the same as the average industrial
12 company. In fact, because the risks attendant to the business of wholesaling unbundled
13 network elements to CLECs are not as great as those faced by the average industrial, Dr.
14 Vander Weide's DCF analysis of the S&P Industrials yields an unduly generous equity
15 return.

16 **Q. IN WHAT WAY HAS DR. VANDER WEIDE EXAGGERATED THE RISKS**
17 **INHERENT IN THE BUSINESS OF SELLING UNBUNDLED NETWORK**
18 **ELEMENTS AT WHOLESALE?**

19 A. In his discussion of risk, Dr. Vander Weide blurs the necessary distinction between
20 various services provided by local exchange companies. Dr. Vander Weide devotes most
21 of his discussion to the risks involved in the business of providing local exchange service
22 at retail rather than the business of providing unbundled network elements at wholesale.
23 In estimating the cost of capital for the business of providing unbundled network

1 elements at wholesale, only the risk encountered in that wholesale line of business is
2 relevant. VZ-VA's other lines of business – be they local exchange service, intraLATA
3 toll service, cellular phone service etc. – are completely irrelevant.

4 Moreover, in describing the local exchange market Dr. Vander Weide presents a
5 distorted view of VZ-VA's ability to compete. Dr. Vander Weide suggests that the level
6 of competition in Virginia is thriving and expanding rapidly (VW p. 37), but overlooks
7 the fact that VZ-VA is the highly dominant and most experienced competitor in the local
8 Virginia market.

9 **Q. CAN YOU PLEASE PROVIDE AN EXAMPLE OF DR. VANDER WEIDE'S**
10 **CONFUSION OF THE BUSINESSES OF LOCAL EXCHANGE SERVICE AND**
11 **LEASING UNBUNDLED NETWORK ELEMENTS?**

12 A. Yes. For this testimony, Dr. Vander Weide relies on the testimony of Harold West III.
13 Mr. West goes on at some length about the competition allegedly faced by VZ-VA in
14 providing local exchange service but fails to narrow his focus solely to facilities-based
15 competition.

16 Local competition that is not facilities-based is irrelevant to the question of the
17 risk faced by a firm in business solely to provide access to local exchange facilities to
18 itself and to third parties. If anything, the increased competition at the retail level would
19 translate into increased opportunities in the wholesale business of leasing network
20 elements, thus making the wholesale business less risky.

1 **Q. HAS VERIZON IN THE PAST RECOGNIZED THE DISTINCTION BETWEEN**
2 **COMPETITION AT THE RETAIL LEVEL AND COMPETITION AT THE**
3 **WHOLESALE LEVEL?**

4 A. Yes. For example, in its 4th Quarter 1999 Investor Quarterly, Verizon (then Bell Atlantic)
5 asserted:

6 And on the wholesale side, our high-efficiency network model allows us
7 to retain as much traffic on our network as possible. Remember, *virtually*
8 *all the competition in the local consumer marketplace travels over our*
9 *network today*, which allows us to retain a high percentage of our retail
10 revenues. The net of all this is a very healthy business: volumes are strong
11 and growing, our wholesale business will grow this year at close to double
12 digit rates, and *even lost market share translates into more traffic for our*
13 *network*. [emphasis added].

14 **Q. CAN YOU PLEASE PROVIDE EXAMPLES OF DR. VANDER WEIDE'S**
15 **DISTORTION OF THE LOCAL EXCHANGE MARKET?**

16 A. Yes. In his testimony, Dr. Vander Weide argues that VZ-VA will have significant
17 disadvantages when faced with competition from CLECs. [Vander Weide Direct
18 Testimony ("VW") pg. 38] He claims that AT&T has a significant competitive
19 advantage compared to Verizon VA because AT&T can bundle its services. [VW pg. 39]
20 Apparently, Dr. Vander Weide believes that customers are more likely to shift their local
21 exchange service to AT&T than to change their long distance carrier. He overlooks,
22 however, the possibility that VZ-VA could keep and attract customers by virtue of being
23 the known and established local exchange provider, or simply by offering a better deal.
24 Verizon itself has presented a much more optimistic view. In its 4th Quarter 1999
25 Investor Quarterly, it stated:

1 On the retail side, we will benefit from the new brand we'll be introducing
2 this year, the bundling opportunities as regulatory barriers fall, and the
3 heightened competitiveness of our core telecom products with LD entry.
4 (*Actually, we have more to gain from being able to compete better for*
5 *business customers than we have to lose in the local consumer market.*)
6 [emphasis added]

7 More recently, Verizon President and Co-CEO Ivan
8 Seidenberg noted in Verizon's second quarter 2001 press release that "[i]n
9 the second quarter, our long-distance business knocked the cover off the
10 ball not only in Massachusetts but across our footprint ..." ⁴

11 **Q. ARE THERE DIFFERING VIEWPOINTS ON THE ABILITY TO CLEC'S TO**
12 **COMPETE?**

13 A. Yes. For example, Brian Adamik of the Yankee Group comments that:

14 As serious as California's electric power crisis is, it's a minor
15 inconvenience compared to the looming disaster in the national
16 telecommunications market created in the wake of the Telecom Act of
17 1996.

18
19 In telecommunications, we are rolling back the competitive progress made
20 over the last ten years --- disabling the enabling industry of economic
21 growth just when we need it most.

22
23 There is still no meaningful competition in residential local service.
24 Worse, long distance and other famously competitive segments of the
25 telecom market are moving towards monopoly control. As incredible as it
26 seems, we are well on our way to re-creating regional versions of the old
27 Bell System monopoly, controlled by the four giant regional Bell
28 companies --- SBC, Verizon, Bell South and Qwest/U.S. West.

29
30 Those companies are gradually winning permission to enter long distance
31 in individual states with their local service monopolies still intact. In those
32 states, the regional Bell company becomes the only effective provider of

⁴ Verizon Press Release, "Verizon Communications Second Quarter Earnings Highlighted by Strong Long-Distance and Wireless Sales," July 31, 2001

1 combined local and long-distance service. For a company in that position,
2 grabbing long-distance market share is like shooting fish in a barrel.

3
4 The Big Three long distance companies (AT&T, WorldCom/MCI and
5 Sprint) were expected to become strong competitors in the new market for
6 combined local and long distance. Yet the Bells have used their control of
7 the local networks to keep long-distance carriers and other potential
8 competitors out of the local market. Meanwhile, the Big Three are
9 struggling for their future existence.

10
11 Their stock went into free fall over the last year. AT&T is restructuring
12 itself into four independent businesses to reduce its dependence on voice
13 long distance. WorldCom/MCI, a pioneer in long- distance competition, is
14 now a takeover target by SBC, the biggest of the regional Bells.
15 Speculation persists that Bell South wants to acquire Sprint at its current
16 bargain price. Of the hundreds of smaller companies now competing in
17 long distance, it's clear that only a handful will survive.

18
19 Many new companies launched to compete in local services are in
20 financial collapse as they try to compete with the Bells while still
21 depending on them for local network support. Furthermore, at least eight
22 high-speed Internet access providers went out of business or declared
23 bankruptcy in late 2000 and early this year.⁵

24
25 **Q. WHAT EVIDENCE DO YOU HAVE THAT INCREASED COMPETITION AT**
26 **THE RETAIL LEVEL WOULD MAKE THE WHOLESALE BUSINESS OF**
27 **LEASING UNBUNDLED NETWORK ELEMENTS LESS RISKY?**

28 **A.** Verizon's own management has expressed this view. As I noted in my direct testimony,
29 Verizon (then Bell Atlantic) stated in its mid-year 1999 Investor's Reference Guide that
30 the business of providing network elements "provides a unique opportunity to add new

⁵ Brian Adamik, Yankee Group, "The death of competitive telecom?", CBS MarketWatch.com, Inc., May 3, 2001.

1 revenues onto our platform without significant incremental capital investment ...”

2 Verizon also noted that “our networks must be able to handle increased traffic volumes
3 from competitors utilizing our infrastructure as we move into a wholesale environment.”
4 Verizon's statements to the public indicate that its own management believes that the
5 network element wholesale business is subject to much less risk than its retail local
6 exchange business.

7 **Q. DOES DR. VANDER WEIDE DISAGREE WITH YOUR ASSERTION THAT**
8 **THE MARKET HAS ALREADY ACCOUNTED FOR THE RISK OF**
9 **POTENTIAL COMPETITION?**

10 A. It does not appear so (although we do disagree as to the extent of competition that the
11 market actually expects). On page 35 of his direct testimony, he stated that “[i]nvestors
12 are primarily interested in expected future competition when they assess the current
13 investment risk of Verizon VA because expected future competition is a primary
14 determinant of volatility in the expected returns on their investment.”

15 **Q. IF DR. VANDER WEIDE IS CORRECT THAT THE MARKET HAS**
16 **INCORPORATED THIS INFORMATION ALREADY, IS THERE ANY NEED**
17 **TO HYPOTHETICALLY ASSUME A FULLY COMPETITIVE MARKET AND**
18 **THEREBY USE S&P INDUSTRIALS AS COMPARABLE COMPANIES**
19 **INSTEAD OF TELEPHONE HOLDING COMPANIES?**

20 A. None whatsoever. The DCF method for estimating the cost of equity is based on market
21 prices which incorporate all available information in the marketplace.

1 **Q. ARE YOU SAYING THAT THE PROSPECT OF INCREASED COMPETITION**
2 **IN THE RETAIL PHONE SERVICE MARKET IS IRRELEVANT FOR**
3 **PURPOSES OF DETERMINING A TELRIC RATE OF RETURN IN THIS**
4 **PROCEEDING?**

5 A. Yes. The FCC, in its August 8, 1996 Order, explicitly defined the relevant risk as the risk
6 incurred in the business of leasing unbundled network elements at wholesale. [¶702]
7 (That the FCC has indicated that "the risk adjusted cost of capital need not be uniform for
8 all elements," further indicates that the relevant risks are those inherent in the business of
9 leasing elements itself, not the risks entailed with retail phone service. [¶702.]) As I said
10 in my prepared direct testimony, whether competition in the local exchange service
11 business will increase depends in the first instance on the unbundled element price to be
12 charged to the new entrants by the incumbent LECs, which is determined by (among
13 other things) the cost of capital. Setting the cost of capital too high due to expectations
14 regarding intense competition down the road (based on Dr. Vander Weide's incorrect
15 interpretation of the FCC's August 8, 1996 Order) could foreclose that competition from
16 ever arising by increasing the price of network elements above forward looking levels.
17 Conversely, setting the cost of capital too low (on the assumption that little or no
18 competition will develop) would attract unexpectedly high levels of competitive entry by
19 decreasing the price of unbundled network elements below forward looking levels. If one
20 instead focuses on the risks attendant to the business of selling access to retailers at

1 wholesale cost, one can derive a cost of capital that is not biased by unsubstantiated
2 speculation about downstream effects in the retail market.

3 **Q. HOW MUCH UNE ACCESS LINE COMPETITION HAS DR. VANDER WEIDE**
4 **CITED AS EVIDENCE IN HIS TESTIMONY?**

5 A. Very little. Dr. Vander Weide refers to Mr. West's testimony, which itself is ambiguous
6 on the number of lines provided by CLECs on a facilities basis. At page 4 of his
7 testimony Mr. West states that "[b]y the end of May 2001, CLECs had more than
8 121,000 facilities-based *and UNE-Platform* residential directory listing and
9 approximately 29,000 facilities-based business directory listings." (*emphasis added*). At
10 page 5 of his testimony, however, Mr. West states that "as of the end of May, CLECs had
11 obtained approximately 150,000 facilities-based directory listings, including more than
12 121,000 for residential customers and more than 29,000 for business customers...".
13 Lines provided as UNE-Platform are not facilities-based competition.

14 According to the FCC's May 2001 report on local competition, Virginia had
15 4,732,058 lines, of which only 414,432 lines were served by CLECs as of December 31,
16 2000. Thus, only approximately 8.8% of the state lines were served by competitors.⁶
17 This percentage overestimates the possible level of facilities-based competition, however,
18 because it includes non-facilities based lines, such as UNE-P and resale lines which
19 Verizon retains as its wholesale UNE customers. Giving Mr. West the benefit of the

⁶ FCC News, *Federal Communications Commission Releases Latest Data on Local Telephone Competition*, May 21, 2001, Table 6.

1 doubt and assuming that there were as many 150,000 facilities-based CLEC lines as of
2 the end of May 2001, this roughly equates to a 3% penetration rate based on 4,732,058
3 total lines.

4 **Q. ARE THE RISKS OF TECHNOLOGICAL INNOVATIONS DISCUSSED AT**
5 **LENGTH BY DR. VANDER WEIDE SOMETHING THAT THE FINANCIAL**
6 **MARKETS ACCOUNT FOR IN VALUING THE COMMON STOCKS OF**
7 **COMPANIES?**

8 A. Yes. The financial markets have been continuously absorbing and incorporating
9 information about technological change. This is evident from financial analyst reports
10 and the public disclosures of the telephone holding companies themselves over the past
11 several years. In his testimonies, Dr. Vander Weide has testified that “[e]conomists and
12 investors consider all the risks that a firm might incur over the future life of the
13 company.”⁷ If investors are aware of new risks that impact a company’s value, they
14 incorporate that awareness into the cost of equity immediately. I have read many of Dr.
15 Vander Weide’s testimonies filed in recent years and note that – both before and after the
16 passage of the 1996 Telecommunications Act – he has described these kinds of risk in
17 great detail based on publicly-available information.

18 **Q. ARE THE RISKS OF UNIVERSAL SERVICE PROVISION RELEVANT AS DR.**
19 **VANDER WEIDE CLAIMS?**

⁷ See, for example, the most recent direct testimony of Dr. James H. Vander Weide before the Maryland Public Service Commission, Case No. 8879, filed May 25, 2001, pg. 19.

1 A. No. In his testimony, Dr. Vander Weide complains that VZ-VA is required to provide
2 universal service to all customers, even those whose revenues fail to cover the cost of
3 providing service. According to Dr. Vander Weide, "[i]nvestors are concerned that the
4 universal service support mechanisms that will be put in place may not be sufficient to
5 balance the incumbent LEC's obligation to continue to provide service in high-cost areas.
6 Competitors, in stark contrast, are free to serve only the most profitable markets." [VW,
7 pg. 38] Thus, Dr. Vander Weide clearly would have the TELRIC rate of return
8 compensate VZ-VA for speculative losses attributable to the retail end of its business.
9 However, there is a mechanism for recovering the cost of universal service, which
10 eliminates any need to compensate for these costs in the TELRIC rate of return. Dr.
11 Vander Weide also fails to point out that the risk of universal service cost reimbursements
12 runs both ways. There is the risk that the universal service providers will be
13 overcompensated in addition to the risk that they will be undercompensated. More to the
14 point, the FCC's prohibition against recovery of the cost of universal service in TELRIC
15 pricing, explicitly precludes VZ-VA's request for recovery of any such speculative losses
16 here. [¶¶ 621-623, 704-717]

17 **Q. PLEASE RESPOND TO DR. VANDER WEIDE'S CLAIM THAT THE BUSINESS**
18 **OF SUPPLYING UNBUNDLED NETWORK ELEMENTS IS RISKIER THAN**
19 **RETAIL SERVICE BECAUSE STATE COMMISSIONS HAVE FAILED TO SET**
20 **RATES FOR NETWORK ELEMENTS HIGH ENOUGH TO RECOVER**
21 **FORWARD-LOOKING ECONOMIC COSTS. [VW. pp. 40]**

1 A. Dr. Vander Weide's suggestion that state Public Service Commissions ("PSCs") cannot
2 be trusted to set rates high enough to comply with the FCC's rules hardly merits a
3 response. The PSCs can decide for themselves whether the rates approved in 1997 are
4 high enough to cover Verizon's forward-looking economic costs. The FCC is fully
5 capable of complying with the same standard in the present case. For present purposes, it
6 is sufficient to note that Dr. Vander Weide has failed to identify any respect in which the
7 PSCs have underestimated VZ-VA's forward-looking costs.

8 **Q. PLEASE RESPOND TO DR. VANDER WEIDE'S CLAIM THAT THE "HIGH**
9 **OPERATING LEVERAGE" OF LOCAL TELEPHONE SERVICE IS A**
10 **SIGNIFICANT RISK FACTOR.**

11 A. Dr. Vander Weide suggests that VZ-VA has high operating leverage to justify his claim
12 that VZ-VA's wholesale selling of UNEs is a high risk business. He claims that
13 operating leverage exists because of "the average LEC's large investment in fixed assets
14 such as central office, transport and loop facilities." [VW, pg. 35] Dr. Vander Weide
15 appears to be referring to embedded costs, which would contradict his earlier arguments
16 that embedded costs are not relevant for the cost of capital. The FCC ruled in its August
17 8, 1996 Order that the LECs would not be permitted to price network elements to recover
18 their embedded costs. [¶¶ 704-706]

19 Assuming, however, that Dr. Vander Weide is not referring to embedded costs,
20 his argument overlooks the fact that Verizon derives tremendous cash flows from its

1 operations. In fact, Verizon consistently maintains EBITDA margins around 40-41%⁸
2 and Verizon's managements explicitly stated that Verizon's "primary source of funds
3 continued to be cash generated from operations".⁹ Dr. Vander Weide's own testimony
4 admits that capital costs depend on the "incremental investment in the
5 telecommunications facilities required to provide interconnection or unbundled network
6 elements..." [VW, pg. 11]

7 **Q. DOES DR. VANDER WEIDE ADDRESS ANYWHERE IN HIS TESTIMONY**
8 **THE RISK OF THE BUSINESS OF PROVIDING UNBUNDLED NETWORK**
9 **ELEMENTS AT WHOLESALE?**

10 A. Yes, but only in passing. He makes the astonishing claim that the risk of providing UNEs
11 at wholesale is greater than the risk of providing retail local exchange service. [VW, pg.
12 40] In doing so, he completely ignores the sizable infrastructure and expenses required
13 for VZ-VA to market and operate its retail business.

14 **Q. DOES DR. VANDER WEIDE PROVIDE ANY EVIDENCE THAT THE**
15 **BUSINESS OF WHOLESALING UNBUNDLED NETWORK ELEMENTS TO**
16 **CLECS IS RISKIER THAN THE BUSINESS OF RETAILING LOCAL**
17 **EXCHANGE SERVICE?**

18 A. No. Instead, he makes the dubious claim that overzealous regulators have required "local
19 exchange carriers such as Verizon-VA ... to lease unbundled network elements at rates

⁸ Deutsche Bank, Verizon Communications, June 14, 2001, p. 5.

⁹ Verizon Communications, Annual Report 2000, p. 22.

1 that are below the cost of providing these elements in a competitive environment.” [VW,
2 p. 40]. He provides no evidence to support this claim, and his own testimony refutes it.

3 On page 37 of his testimony, Dr. Vander Weide claims that many competitors are
4 building their own facilities. If VZ-VA were truly offering UNEs below cost, there
5 would be no incentive for competitors to build their own facilities.

6 **Q. IN HIS PRIOR TESTIMONIES DR. VANDER WEIDE HAS CLAIMED THAT**
7 **TELEPHONE HOLDING COMPANIES FACE LESS RISK THAN A**
8 **WHOLESALE PROVIDER OF NETWORK ELEMENTS DUE TO**
9 **DIVERSIFICATION. IS THAT THE CASE?**

10 A. No. In the case of telephone holding companies, engaging in businesses which are
11 systematically riskier than the wholesale network element business will always make the
12 risk of the telephone holding company greater than that of the wholesale network element
13 leasing business. Overall risk can never fall because of the acquisition of systematically
14 riskier businesses. This can be illustrated with a simple example. If you hold a one-asset
15 portfolio comprised of a productive local oil well with enormous proven reserves, you
16 will not make that oil well less risky by undertaking wildcat oil drilling in Iraq. Your
17 overall holdings become more risky by making a fundamentally riskier investment.

18 In the context of the telephone holding companies, the FCC and the major rating
19 agencies have recognized that investments in businesses outside of local exchange have
20 made them riskier. For example, in early 2000 Moody’s downgraded BellSouth’s debt
21 rating to Aa3 from Aa1 to reflect Moody’s expectation that “BellSouth will accelerate the